

Outdoor Occasional Table



Use angled cuts to create an interesting table for your deck

From our Editors

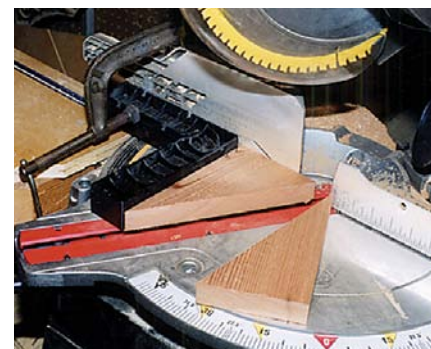
This fun and funky-shaped table is an easy weekend project. It requires a few basic tools and a little patience (when you're gluing up the table top), but the project can be done by a woodworker of any skill level.

For this project we chose redwood, which weathers well, for the tabletop, apron, and shelf. We use maple for the legs and support blocks for additional strength. To protect the maple, which isn't as rot resistant, and to give the piece a smooth finish, we apply a spar polyurethane varnish to the whole project. You could also make the tabletop, apron, and shelf from cedar with maple legs, or even make the whole project from durable but expensive teak.

BUILDING THE TABLETOP



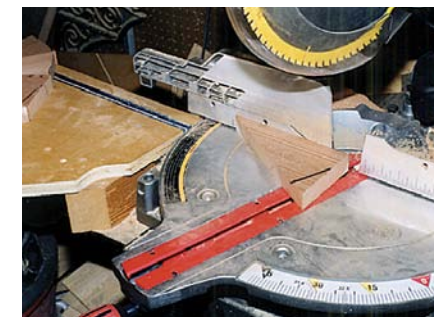
▲ Step 1: Cut the pieces to size. To cut the tabletop pieces, plane both sides of three 16" (406mm)-long pieces of redwood to 1" (25mm) thick. Joint one edge and rip the wood to 4½" (114mm) wide. Crosscut the pieces into six 8" (203mm)-long pieces.



▲ Step 2: Cut the pieces on an angle. Set a miter saw to a 30° angle. Make a diagonal cut from corner to corner on an 8" (203mm) side of the tabletop pieces. Clamp a corner brace or square blank to the fence to secure the stock and keep your fingers out of the way.



▲ Step 3: Check the fit of the miters. Stack the 12 cut pieces together to check the fit of the miter cuts; trim, if necessary.



▲ Step 4: Cut the second angle. Set the miter saw to a 15° angle. Make a mark 1" (25mm) from the corner, place the square edge of the piece against the saw fence, and cut along the line to remove the sharp edge.



▲ Step 5: Glue and clamp the sections. Using waterproof glue, assemble and clamp six pieces together to create half of the tabletop. Use a web clamp against a sturdy piece of wood scrap to apply pressure, and use waxed paper to make sure the glue stays on the pieces. When the glue has cured, assemble the other half. Connect the two halves using glue, the web clamp, and other clamps as needed.



▲ Step 6: Sand the tabletop. Using a belt sander, sand the outside edges of the top. Then, sand the top and bottom portions to achieve a flat surface.



▲ Step 7: Round over the edges. Install a ⅛" (3mm)-radius round-over bearing bit in a router. Round the top and bottom edges of the tabletop.

Step 8: Cut the apron pieces. Set the miter saw to a 30° angle. Cut one end of the apron pieces, measure from that end, and make a mark at 6¾" (171mm). Then, cut on the mark to form a barrel-stave-style apron.

Step 9: Assemble the apron. Using brads and waterproof glue, assemble the six table apron pieces. Use scrap wood as a backing brace when nailing the ends together. Fill the nail holes and sand the assembly.



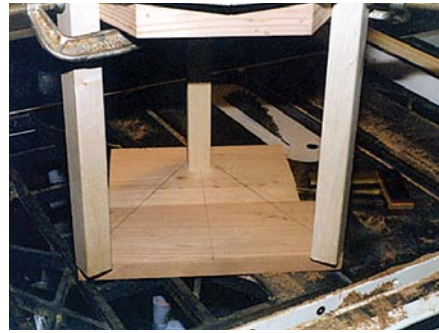
▲ Step 10: Prepare the screw holes. Set the assembled and sanded apron on the underside of the tabletop. Referring to the assembly drawing, mark the screw hole mounting locations. Countersink a ⅜" (10mm)-diameter by 1" (25mm)-deep hole for each screw in the bottom edge of the apron.

Step 11: Attach the tabletop to the apron. Apply waterproof glue to the edge of the apron that attaches to the bottom of the table, center the apron on the table, and install 12 #8 by 1½" (38mm)-long apron screws into the countersunk holes, one screw in each tabletop segment.

BUILDING THE SHELF & LEGS

Step 12: Prepare the shelf. Cut and glue up enough redwood to form a 13" by 13" by 13" (330 by 330 by 330mm) triangle for the shelf. Cut off the tip of the triangle as shown at right.

Step 13: Cut the legs. Cut the legs to size. Round the edges of the legs with the 1/8" (3mm)-radius round-over bit.

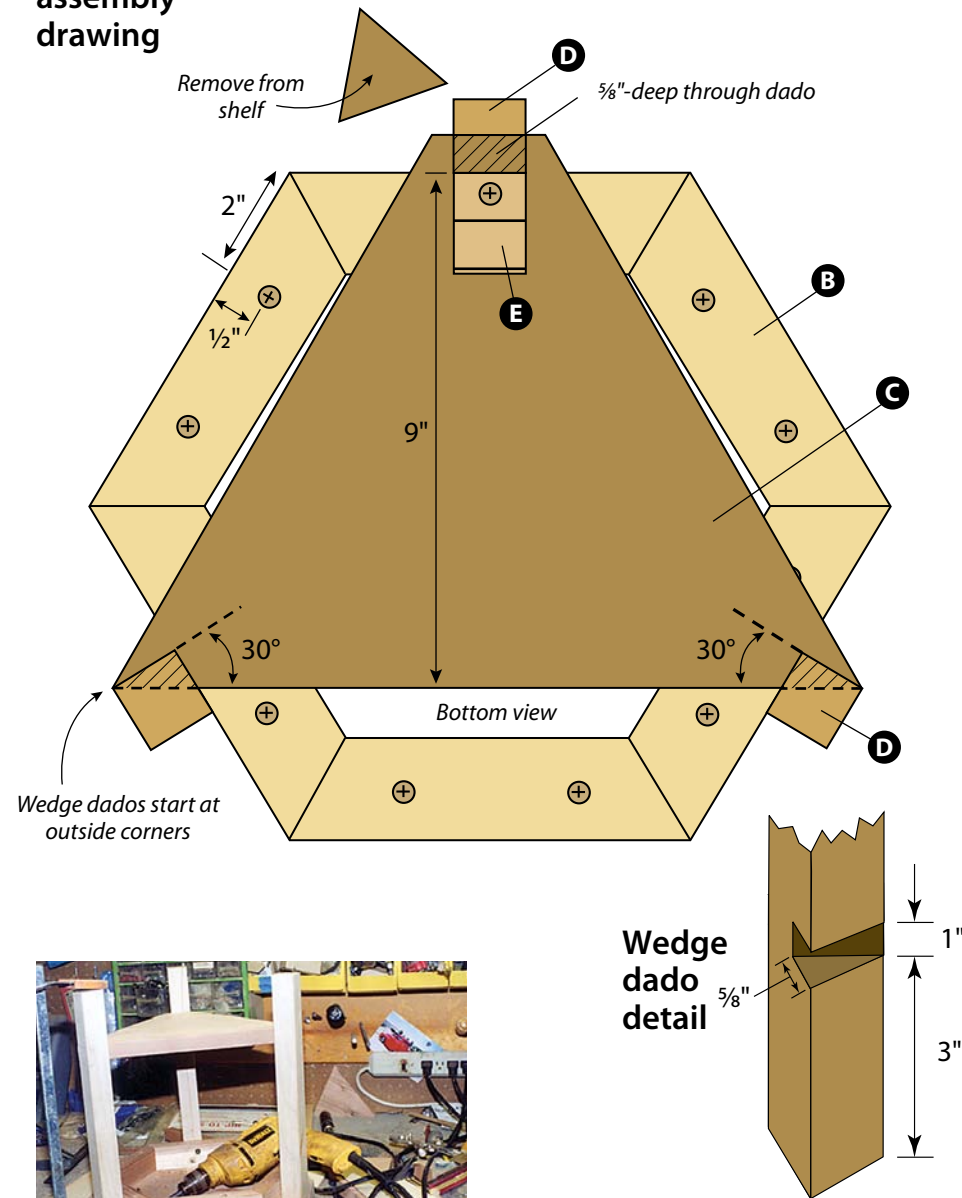


Step 14: Check the leg placement. Temporarily clamp the legs to the apron. Set the assembly on top of the shelf to ensure the proper placement of the legs on the shelf.



Step 15: Cut the shelf-supporting dados. When the legs fit against the apron and shelf, cut 1" (25mm)-wide dados for the shelf. Two of the legs have a wedge-cut dado; the remaining leg has a traditional dado. All dados start 3" (76mm) up from the bottom of the legs. Set up the table saw with 1" (25mm) stacked dado blades, 5/8" (16mm) high. Cut the wedge dados by placing a wedge piece cut at a 30° angle against the saw fence to achieve the proper angle (refer to the wedged dado detail). The wedge dado starts at the outside corner of each of the two legs and comes out midway through the thickness of the legs. Cut the through dado 5/8" (16mm) deep on the remaining leg.

Leg and shelf assembly drawing



Step 16: Drill leg holes. Drill a 3/8" (10mm)-diameter by 3/8" (10mm)-deep countersink hole on the outside of each leg, across from where it mates with the shelf. Then, drill two 3/8" (10mm)-diameter by 3/8" (10mm)-deep countersink holes on the inside of the apron across from each leg location.

Step 17: Attach the legs to the apron and shelf. Use waterproof glue and #8 by 1 1/2" (38mm)-long leg screws. Use two screws per leg on the apron inside and one on each outside shelf location. Use enough clamps to be certain that the assembly stays square.



Step 18: Attach the support block. Because of the short grain on the one edge of the shelf triangle, add a support block on the bottom of the shelf using wood glue and a #8 by 1 1/2" (38mm)-long screw.

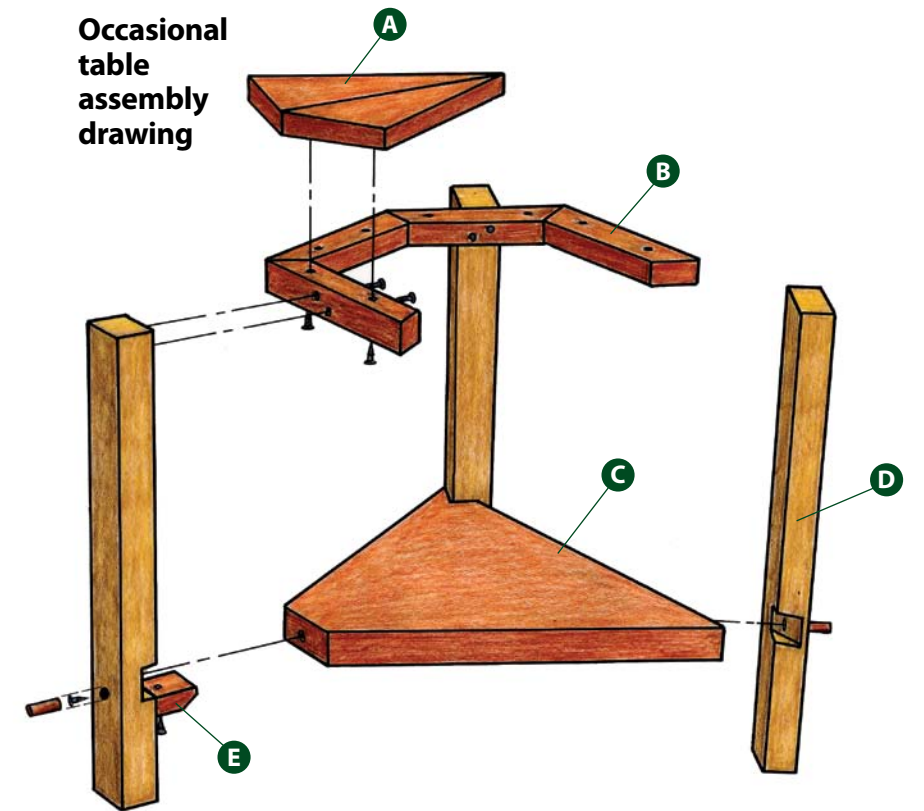
FINISHING THE TABLE



Step 19: Fill the holes. Use pieces of 3/8" (10mm)-diameter cherry dowel rod to fill the countersunk holes on the outside legs. Glue, cut them off flush with the edges of the legs with a hand saw, and sand.

Step 20: Apply a finish. Apply four coats of spray-on spar polyurethane after the final sanding.

Occasional table assembly drawing



Cutting List

Item	Materials	Dimensions	Quantity
A	redwood	1" x 4 1/2" x 8" (25 x 114 x 203mm)	6
B	redwood	1" x 1 3/4" x 6 3/4" (25 x 44 x 171mm)	6
C	redwood	1" x 13" x 13" (25 x 330 x 330mm)	1
D	maple	1 1/4" x 1 1/4" x 14" (32 x 32 x 356mm)	3
E	maple	1" x 1 1/4" x 1 3/4" (25 x 32 x 44mm)	1

Materials & Tools

Materials:

- Redwood, 1" (25mm) thick: tabletop, 3 each 4 1/2" x 16" (114 x 406mm); table apron, 1 3/4" x 42" (44 x 1,066mm); shelf triangle, 13" x 13" (330 x 330mm)
- Maple, 1 1/4" (32mm) thick: legs, 1 1/4" x 42" (32 x 1,066mm); support block, 1" x 1 3/4" (25 x 44mm)
- Cherry dowel, 3/8" (10mm) diameter: assorted small pieces
- Waterproof wood glue
- Spar polyurethane varnish
- Wood putty
- Sandpaper
- Wood screws: #8 x 1 1/2" (38mm) long

Tools:

- Saws: table saw, miter saw, hand saw
- Stacking dado blade
- Clamps: web; bar
- Belt sander
- Router with bit: 1/8" (3mm)-radius round-over
- Drill with bit: 3/8" (10mm) diameter
- Tool kit

The author used these products for the project. Substitute your choice of brands, tools, and materials as desired.